In the Claims:

1. (Currently Amended) A method for detecting signals comprising:

reading sets of search parameters;

generating a group of hypotheses from the sets of search ~~parameters;~~ parameters, after reading the sets of search parameters;

assigning each hypothesis from selected ones of the groups to a respective correlator;

correlating a pseudo-random number (PN) sequence generated from each hypothesis against a received sequence;

accumulating the correlation result; and

processing the accumulation result.

2. (Previously Presented) The method of claim 1, wherein the sets of search parameters are stored in a record memory.

3. (Previously Presented) The method of claim 2, wherein dependent sets of search parameters are stored together in a portion of the record memory.

4. (Currently Amended) The method of claim 2, wherein there is a result memory, and wherein results from the processing are stored in the result memory with [[the]] a same reference number as used to store the set of search parameters used to obtain the results from processing.

5. (Original) The method of claim 1 further comprising prior to the reading:

determining availability of storage space; and

writing the set of search parameters by a control unit if storage space is available.

6. (Original) The method of claim 5 further comprising repeating the determining and the writing until storage space is no longer available or all sets of search parameters have been written.

7. (Original) The method of claim 1 wherein the assigning comprises:

assigning each hypothesis from the group to a correlator if there are as many idle correlators as there are hypotheses in the group; and

assigning as many hypotheses as there are idle correlators, wherein each hypothesis is assigned to a correlator, if there are fewer idle correlators than hypotheses.

8. (Previously Presented) The method of claim 1, wherein the assigning comprises: determining if there are a sufficient number of correlators; and repeating the reading, generating, and assigning with a different set of search parameters if there is an insufficient number of correlators.

9. (Original) The method of claim 1 further comprising repeating the reading, generating, and assigning as long as there are idle correlators.

10. (Original) The method of claim 1 further comprising storing the results from the processing.

11. (Currently Amended) The method of claim 10, ~~wherein~~ wherein:

the sets of search parameters further comprise dependent sets;

each dependent set of search parameters is assigned a common reference ~~number,~~ number; and

~~wherein~~ the results of the processing using the dependent set of search parameters is stored using the common reference number.

12. (Previously Presented) The method of claim 1, wherein each set of search parameters specifies a single hypothesis, and wherein each group of hypotheses contains the single hypothesis of a set of search parameters.

13. (Currently Amended) A circuit comprising:

a memory to store a plurality of sets of search parameters and search results, wherein each set of search parameters is assigned a common reference number, and a corresponding set of search results for [[a]] each set of search parameters is stored with the same common reference number;

a searcher coupled to the memory, the searcher containing circuitry to read a set of search parameters from the memory, process pseudo-random number (PN) sequences generated based on the set of search parameters with a received sequence, and write the correlation results to a set of search results with the reference number of the set of search parameters; and

a sequence generator coupled to the searcher, the sequence generator containing circuitry to generate a PN sequence from each hypothesis provided to it by the searcher.

14. (Original) The circuit of claim 13, wherein the memory further comprises:

a common parameter storage space to store search parameters common to each set of search parameters currently in the memory; and

a common result storage space to store search results common to each search result currently in the memory.

15. (Original) The circuit of claim 13 further comprising:

a hypothesis generator coupled to the memory and the search engine, the hypothesis generator containing circuitry to generate hypotheses from the set of search parameters and from a timing reference provided by the searcher; and

a result processor coupled to the search engine and the memory, the result processor containing circuitry to compare the set of search results against a specified threshold.

16. (Original) The circuit of claim 13, wherein the searcher comprises:

a plurality of correlators to correlate a received sequence with each of the generated PN sequences;

a control memory to store control information for use in the processing of the generated PN sequences; and

a scratch memory to store temporary results during the processing.

17. (Original) The circuit of claim 16, wherein the control memory and the scratch memory are partitioned into a plurality of storage spaces, and wherein there is a control memory storage space and a scratch memory storage space for each correlator.

18. (Original) The circuit of claim 13, wherein the memory can store eight (8) sets of search parameters, eight (8) sets of search results, and wherein the searcher has 256 correlators.

19. (Currently Amended) A wireless device comprising:

an analog front end coupled to an antenna, the analog front end containing circuitry to filter and amplify a received signal provided by the antenna;

an analog-to-digital converter (ADC), the ADC to convert an analog signal provided by the analog front end into a digital symbol stream; and

a processing unit coupled to the ADC, the processing unit containing circuitry to store together a plurality of dependent sets of search parameters, search results, and test hypotheses derived from the sets of search parameters.

20. (Original) The wireless device of claim 19, wherein the processing unit comprises:

a memory to store sets of search parameters and search results, wherein each set of search parameters is assigned a reference number, and a set of search results for a set of search parameters is stored with the same reference number;

a controller coupled to the memory, the controller to write sets of search parameters to the memory and retrieve sets of search results from the memory; and

a searcher coupled to the memory and the controller, the searcher containing circuitry to read a set of search parameters from the memory, create hypotheses from the set of search parameters, correlate the hypotheses with a received sequence, and write the correlation results to a set of search results with the reference number of the set of search parameters.

21. (Original) The wireless device of claim 20, wherein the memory further comprises:

a common parameter storage space to store search parameters common to each set of search parameters currently in the memory; and

a common result storage space to store search results common to each search result currently in the memory.

22. (Original) The wireless device of claim 20, wherein the searcher comprises a plurality of correlators, wherein a set of search parameters can result in a plurality of hypotheses, and wherein each hypothesis from the plurality of hypotheses is assigned to a unique correlator.

23. (Original) The wireless device of claim 22, wherein each assigned correlator correlates a pseudo-random number (PN) sequence generated from its hypothesis with a received sequence.

24. (Original) The wireless device of claim 23, wherein each assigned correlator correlates with the same received sequence.

25. (Original) The wireless device of claim 20, wherein the controller also specifies when the searcher may assert an interrupt to notify the controller that the searcher has completed processing an assigned search.

26. (Original) The wireless device of claim 19, wherein the wireless device operates in a digital communications network.

27. (Original) The wireless device of claim 26, wherein the digital communications network is a direct sequence spread spectrum communications network.

28. (Currently Amended) The wireless device of claim 27, wherein the digital communications network is a code division multiple access (CDMA) communications network compliant to a CDMA2000 technical standard. ~~compliant communications network.~~

29. (Original) The wireless device of claim 27, wherein the digital communications network is a Universal Mobile Telephony System (UMTS) compliant communications network.

30. (Original) The wireless device of claim 26, wherein the wireless device is capable of operating in a plurality of digital communications networks.

31. (Previously Presented) The method of claim 1, wherein the groups of hypothesis are dependent sets.

32. (Previously Presented) The method of claim 1, wherein the groups of hypothesis are independent sets.

33. (Previously Presented) The method of claim 1, wherein the groups of hypothesis are dependent and independent sets.

34. (Previously Presented) The method of claim 1, wherein hypotheses within a single group are dependent but the groups themselves are independent.

35. (Previously Presented) The method of claim 34, wherein each group specifies a window of a particular size and location at a different place in a PN sequence.

36. (Previously Presented) The method of claim 33, wherein groups of hypothesis having parameters common to both the dependent and independent sets are stored in a common parameters portion of the record memory.

37. (Previously Presented) The method of claim 3, wherein said portion is a partitioned portion of the record memory.